

**Application instruction
for LIMMS internship FY 2026**
**On " *Application of an amplification circuit to control a
neurocardiac bio-hybrid system* "**
**at TIXIER-MITA laboratory, LIMMS/CNRS-IIS,
The University of Tokyo**

1. Internship description

- **Location:** LIMMS/CNRS-IIS (IRL 2820), Tokyo, Japan
- **Internship title:** Application of an amplification circuit to control a neurocardiac bio-hybrid system
- **Internship duration:** 1 to 6 months
- **Accommodation support:** 70 000 yens / month for maximum 6 months (420 000 yens max. per person)
- **Expenses:** Airplane tickets and incidental expenses are **NOT** covered by LIMMS.
- **Contract:** Up to 6 months. An internship contract between IIS-UTokyo and the French school will be finalized, which will define the rules and obligations (both overseas travel accident insurance and liability insurance) during the stay at LIMMS/CNRS, IIS UTokyo.
- **Starting & Ending dates:** The internship should start on the 1st of March 2026 or beyond and finish before the 31st of March 2027.
- **Visa:** Students who will participate in the program for more than 90 days must have a visa. An administrative procedure takes about 3 months.

Job Duties

- Characterize an amplification card develop previously to adjust a stimulation signal on cardiomyocyte cells.
- Use that card to study the effect of amplitude and frequency of stimulation signal on cell electrophysiological activity and contraction strength
- Determine the best stimulation signal for cells to recover from some a simulated disease (tachycardia for instance).

Skills and Experience

- Electronics (circuit design, circuit fabrication)
- Some knowledge in programming (Python, eventually VHDL)
- Interest in biology (eventually experience in biology)
- It will be for a 5-6 months internship. Level required: Master degree level, or last year of engineer school.

2. Please send the following items to LIMMS direction <limmsadm@iis.u-tokyo.ac.jp>

1. CV

2. Motivation letter

- Candidates are kindly advised to send LIMMS direction the requested documents with an e-mail **subject "internship title"FY2026 followed by the candidate's full name.** Sending documents with a different e-mail subject might be at risk of being overlooked.

3. Submission Deadline (Closing date) for applications is 30 November 2025.

- Please note that due to our administrative procedure, we cannot accept your applications AFTER the deadline.
- Due to a large number of applications, it is not possible to reply to you if you are not shortlisted. If you have not heard from us within one month of the closing date, please assume that your application has not been successful on this occasion.

4. Notification of results

After approval by the screening committee in LIMMS, notification of the acceptance will be sent both to the intern and the host professor of LIMMS.